

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

Serial No. : **09/898,958** Confirmation No. **9735**
Applicant : **Smith, Jack V.**
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TC/A.U. : **3728**
Examiner : **Pagan, Jenine Marie**
Docket No. : **1414.47**
Customer No. : **21,901**
For : **Inflatable Box**

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BRIEF OF APPELLANT

Sir/Madam:

In furtherance of the appeal from the final Rejection with an electronic notification date of 06/11/2010, Applicant hereby submits this Appeal Brief.

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1. REAL PARTY IN INTEREST

The real party in interest is Jack V. Smith, the inventor.

2. RELATED APPEALS AND INTERFERENCES

A Notice of Appeal and Appeal Brief were filed on 03/28/2005, pro se. The proper filing fees were not submitted, and the Appeal Brief was not in the proper format. As a result, the appeal was dismissed.

3. STATUS OF CLAIMS

Claims allowed:	None
Claims objected to:	None
Claims rejected:	6, 7, and 12-18
Claims withdrawn:	1-5 and 8-10
Claims cancelled:	11
Claims under appeal:	6, 7, and 12-18

4. STATUS OF AMENDMENTS

No amendments have been made subsequent to the final rejection by the Office.

5. SUMMARY OF CLAIMED SUBJECT MATTER

Citations to the specification are by page and line number. A concise explanation of the invention defined in the claims involved in this appeal is provided below. Claim 6 is the only independent claim under appeal.

The invention is a shipping box that includes an internal bladder that is inflated through an external valve after the box has been closed. (See page 2, lines 25-28). Specifically, the shipping box includes a bladder that is connected to the internal sides and bottom of the box. (See page 5, lines 16-19). The bladder includes a valve that passes through an opening in the box. (See page 5, lines 19-21). The valve includes an inlet port for filling the bladder with air. (See page 5, lines 21-25). Accordingly, to use the shipping box, the bottom of the box is folded shut and an item is placed within the box. Next, the top of the box is folded shut. The internal bladder is then inflated through the valve and the item is fully engulfed by the bladder. (See page 6, lines 10-15).

Claim 6 recites a package that cushions items being shipped, comprising: a box having a hollow interior defined by a top wall, a bottom wall, and sidewalls interconnecting said top and bottom walls (see page 5, lines 16-19); a first inflatable bladder affixed within said hollow interior of said box, said first inflatable bladder being connected to each said sidewall, said first inflatable bladder being disposed in protecting relation to said bottom wall of said box (see page 5, lines 16-19); an opening formed in said box (see page 5, lines 19-21); a normally closed valve disposed in sealing engagement with said opening (see page 5, lines 19-21); said normally closed valve having an inlet port external to said box (see page 5, lines 21-25); said inlet port adapted to be connected to a source of gaseous fluid under pressure (see page 6, lines 6-7); said inlet port being in fluid communication with said first inflatable bladder so that said first inflatable bladder is inflated when said source of gaseous fluid under pressure is connected to said inlet port (see page 6, lines 4-7); and said first inflatable bladder when inflated engulfs said item being shipped and serves as a cushioning means for said item during shipping (see page 6, lines 5-9).

6. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

I. Whether claim 6 should stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cash et al. (US 5769232) in view of Kim (US 5624035).

7. ARGUMENT

I. Whether claim 6 should stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cash et al. (US 5769232) in view of Kim (US 5624035).

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Cash et al. (US 5769232) in view of Kim (US 5624035).¹ The Office finds *Cash* discloses an inflatable box, as claimed in claim 6, having a hollow interior defined by a top wall, a bottom wall, and sidewalls, a first inflatable bladder within said hollow interior, a normally closed valve having an inlet port external to said box, said inlet port being adapted to connected to a gaseous fluid under pressure, said inlet port being in fluid communication with said first bladder so that said first inflatable bladder is inflated when said source of gaseous fluid under pressure is connected to said inlet port, and said first inflatable bladder when inflated engulfs said item being shipped and serves as a cushioning means.² The Office admits *Cash* does not disclose the first inflatable bladder being affixed to the interior of the box, nor does *Cash* disclose a normally closed valve disposed in sealing engagement with an opening in the box.³ The Office asserts that *Kim* compensates for the deficiencies in *Cash* and finds it “obvious to one having ordinary skill in the art . . . to have the first bladder of Cash affixed to the container as taught in Kim, since Kim suggests at Col 3:47-50 that such a modification would form an intergraded structure and prevent the bladder from shifting during transportation.”⁴ The Office further finds that *Kim* discloses a valve “extending outside of the container through an opening.”⁵

Appellant appeals the Office’s finding because: (1) the proposed combination of references does not teach every element of the invention; (2) the Office used impermissible hindsight; and (3) the claimed invention provides unexpected results, not disclosed by the proposed combination.

1. Proposed Combination Does Not Teach Every Element of the Invention

a. A single bladder vs. multiple bladders connected via air passages/conduits.

Cash and *Kim* fail to disclose the claimed invention because the proposed combination of references does not teach every element of the invention. All limitations of a claim must be

¹ Page 3 of final Office Action, dated 06/11/10.

² Page 3-4 of final Office Action, dated 06/11/10.

³ Page 4 of final Office Action, dated 06/11/10.

⁴ Page 4 of final Office Action, dated 06/11/10.

⁵ Page 4 of final Office Action, dated 06/11/10.

considered when weighing the differences between the claimed invention and the prior art in determining obviousness.⁶ *Cash* discloses an inflatable protective lining system comprising six rectangular chambers that are interconnected such that they can be folded to form a rectangular enclosure.⁷ In a first embodiment, “the four side chambers 3-6 are interconnected via a plurality of air passages 13,”⁸ and the “bottom chamber 2 and the top chamber 7 are isolated from the side chambers 3-6.”⁹ In a second embodiment, the six chambers are “commonly interconnected via respective air passages 41.”¹⁰ Similarly, *Kim* discloses a carrying case with “a plurality of sections 28 and air interconnect conduits 30. Each section 28 of the enclosure assembly 22 attaches to at least one interconnect conduit 30. The interconnect conduits 30 connect between adjacent sections 28 to communicate air between each section 28 and an adjacent section 28.”¹¹ Both *Cash* and *Kim* fail to disclose a single inflatable bladder, but uses a series of inflatable bladders that are connected by a series of air passages/conduits. In sharp contrast, claim 6 provides “a first inflatable bladder affixed within said hollow interior of said box, said first inflatable bladder being connected to each said sidewall, said first inflatable bladder being disposed in protecting relation to said bottom wall of said box[.]” Claim language is interpreted based on the ordinary and customary meanings of a term, as viewed in light of the specification.¹² Thus, a single inflatable bladder is connected to the sidewalls of the box, and also oriented as to protect the bottom wall. The bladder is not compartmentalized and does not include air passages/conduits. Applicant therefore submits that the combination of *Cash* and *Kim* fails to disclose a single air bladder as contended by the Office.

b. A normally closed valve disposed in sealing engagement with an opening in the box.

Cash and *Kim* fail to disclose the claimed invention because the proposed combination of references does not teach every element of the invention. All limitations of a claim must be considered when weighing the differences between the claimed invention and the prior art in

⁶ *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

⁷ *Cash* Abstract (“a plurality of double wall inflatable chamber . . .”).

⁸ *Cash*, col. 4, lines 12-13.

⁹ *Cash*, col. 4, lines 14-15.

¹⁰ *Cash*, col. 4, lines 44-45.

¹¹ *Kim*, col. 3, lines 40-45.

¹² *See In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) (“This means that the words of the claim must be given their plain meaning unless the plain meaning is inconsistent with the specification.”); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313, 75 USPQ2d 1321, 1326 (Fed. Cir. 2005) (“[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.”).

determining obviousness.¹³ The Office admits that *Cash* does not disclose a normally closed valve disposed in sealing engagement within an opening in the box.¹⁴ To overcome this deficiency, the Office asserts *Kim* discloses a valve extending outside of the container through an opening.¹⁵ Applicant respectfully traverses this finding as claim 6 provides that the box possesses an opening and that the opening is sealingly engaged with a valve. This is an important aspect of the invention because it allows a user to place an object into the box, seal the box, and then inflate the air bladder while the box is completely closed. This permits the cushion to be inflated at the bottom and sides at the same time, thereby providing an efficient cushioning around the entire article, as seen in Figs. 4 and 10. In sharp contrast, *Cash* requires the liner be inflated before the box is closed.¹⁶ Likewise, *Kim* requires the case be inflated prior to closing, as the inflator is located in the interior section of the case.¹⁷ *Kim* limits the protection afforded by the cushions by requiring the user to inflate the cushions prior to case closure. The user must guess the proper inflation, with the case fully open or top still open, since the inflator is located inside the case.

As stated above, the Office asserts *Kim* discloses a valve extending outside of the container through an opening. The Office rests this assertion on element 24 of Fig. 4. However, element 24 of Fig. 4 is unclear as to whether it extends through an opening in the container or is connected directly to the air bladder as depicted in Fig. 1. Moreover, nowhere is the specification does *Kim* refer to element 24 passing through an opening in the container. Applicant therefore submits that the combination of *Cash* and *Kim* fails to disclose a normally closed valve disposed in sealing engagement within an opening in the box.

2. Impermissible Hindsight

There is no suggestion to combine the teachings and suggestions of *Cash* and *Kim*, as advanced by the Office, except from using Appellant's invention as a template through a hindsight reconstruction of Appellant's claims. As stated in *KSR*:

a patent composed of several elements is not provided obvious
merely by demonstrating that each element was, independently,
known in the prior art [I]nventions in most, if not all,

¹³ In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

¹⁴ Page 4 of final Office Action, dated 06/11/10.

¹⁵ Page 4 of final Office Action, dated 06/11/10.

¹⁶ See Cash Abstract ("the lining system is inserted into the shipping container"); Cash, col. 1, line 10; Cash, col. 2, line 31; Cash, col. 4, lines 6-7 and 50.

¹⁷ Kim, Fig. 1, element 24.

instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.¹⁸

The Office admits *Cash* does not disclose the first inflatable bladder being affixed to the interior of the box.¹⁹ The Office asserts that *Kim* compensates for the deficiencies in *Cash* and finds it “obvious to one having ordinary skill in the art . . . to have the first bladder of *Cash* affixed to the container as taught in *Kim*, since *Kim* suggests at Col 3:47-50 that such a modification would form an intergraded structure and prevent the bladder from shifting during transportation.”²⁰ However, *Cash*, as the primary reference, provides no teaching, suggestion, or motivation to attach the liner to the interior of the box. In fact, *Cash* explicitly teaches away from any such attachment. Specifically, *Cash* states five (5) times through the specification that the liner is “inserted into a shipping container.”²¹ Because the liner is inserted into the shipping container, it cannot be attached to it.

3. The claimed invention provides unexpected results, not disclosed by the proposed combination.

The combination of *Cash* and *Kim* do not obviate the claimed invention as the claimed invention possesses properties not expected in the combined references. The claimed box allows a user to place an object into the box, seal the box, and then inflate the cushioning. The present invention provides for the first inflatable bladder to be attached to the four sidewalls of the package with a portion of the bladder extending to cover the bottom of the package. This permits the cushion to be inflated at the bottom and sides at the same time, thereby providing an efficient cushioning around the entire article, as seen in figures 4 and 10.

The structure of the claimed invention allows a user to completely close the box and then inflate the internal bladder. This provides marked advantages over the prior art; in particular, the claimed invention eliminates the hazard of the bladder exploding in the face of a user because the box is closed. In sharp contrast, no reference is made in *Cash* or *Kim* to completely closing the box and then inflating the bladders. In fact, in *Cash*, reference is made to inflating the liner and then inserting it into the box.

¹⁸ 127 S. Ct. at 1741.

¹⁹ Page 4 of final Office Action, dated 06/11/10.

²⁰ Page 4 of final Office Action, dated 06/11/10.

²¹ See *Cash* Abstract (“the lining system is inserted into the shipping container”); *Cash*, col. 1, line 10; *Cash*, col. 2, line 31; *Cash*, col. 4, lines 6-7 and 50.

8. CLAIMS APPENDIX

6. A package that cushions items being shipped, comprising:

a box having a hollow interior defined by a top wall, a bottom wall, and sidewalls interconnecting said top and bottom walls;

a first inflatable bladder affixed within said hollow interior of said box, said first inflatable bladder being connected to each said sidewall, said first inflatable bladder being disposed in protecting relation to said bottom wall of said box;

an opening formed in said box;

a normally closed valve disposed in sealing engagement with said opening;

said normally closed valve having an inlet port external to said box;

said inlet port adapted to be connected to a source of gaseous fluid under pressure;

said inlet port being in fluid communication with said first inflatable bladder so that said first inflatable bladder is inflated when said source of gaseous fluid under pressure is connected to said inlet port; and

said first inflatable bladder when inflated engulfs said item being shipped and serves as a cushioning means for said item during shipping.

7. The package of claim 6, further comprising:

a second inflatable bladder disposed in said hollow interior of said box in cooperative relation to said first inflatable bladder to provide an enhanced cushioning means that engulfs said item being shipped; and

said box having four side walls and closable flaps on the top horizontal and bottom horizontal sections.

12. The package of claim 6, further comprising:

said first inflatable bladder being disposed in protecting relation to said sidewalls of said box.

13. The package of claim 6, further comprising:

said box being made of a rigid material.

14. The package of claim 6, further comprising:

said box being made of a semi-rigid material.

15. The package of claim 6, further comprising:

a hand pump in fluid connection with said first inflatable bladder.

16. The package of claim 6, further comprising:

said first inflatable bladder further comprises a bottom inflatable lumen shaped to cover said bottom wall of said box.

17. The package of claim 6, further comprising:

said first inflatable bladder further comprises an inflatable lumen disposed near said top wall of said box and is adapted to inflate between said box and said item.

18. The package of claim 6, further comprising:

said first inflatable bladder further comprises a bleed valve disposed in fluid communication with said first inflatable bladder.

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9. EVIDENCE APPENDIX

None

10. RELATED PROCEEDINGS APPENDIX

None

CONCLUSION

Applicant respectfully submits that the rejection of claim 6 is improper. Fairness to Applicant requires reversal of the final rejection; therefore, such reversal is solicited.

Very respectfully,

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